

# Health Education in Practice

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## Using MAPP to Connect Communities: One County's Story

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### Abstract

Public health leaders of the 21st century are challenged by increasingly complex problems and escalating expectations amid scarce or shrinking resources. Community and interdisciplinary collaboration holds promise for synergism and capacity building. Mobilizing for Action through Planning and Partnerships (MAPP), the latest assessment-planning-action model developed by the National Association of County and City Health Officials (NACCHO), guides public health leaders in a strategic planning process that involves community members from assessment throughout action and evaluation. One local health department's experience with MAPP is described from constitution of assessment teams, data collection, and priority identification to planning a community-based intervention. The strategic priority, creating a broader sense of community connectedness, was articulated to address quality of life issues in the county. A community-wide fitness challenge was issued; and 110 teams answered, participating in activities such as walking, aerobics, and swimming. Participants stayed connected to the campaign through the website. The campaign brought multiple constituencies together, including schools, faith-based organizations, fitness professionals, even capturing international attention.

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### Background

Public health is defined by the Institute of Medicine (1988) as creating the conditions in which people can be healthy. Implicit in this definition are high expectations for public health leaders. Yet today's public health leaders are challenged by increasingly complex problems amid shrinking resources. Community and interdisciplinary collaboration holds promise to address complex problems with scarce resources. St. Clair County Health Department (SCCHD)

adopted MAPP as a framework to assess, prioritize, and address community health concerns. The following account describes how SCCHD identified and continues to address a non-traditional health priority emerging from the 2005 MAPP process, creating a broader sense of community connectedness.

MAPP was developed by the Centers for Disease Control and Prevention (CDC), the Public Health Practice Program (PHPP), and NACCHO. Core functions, the ten essential public health services, and National Public Health Performance Standards are evident in the MAPP principles (Erwin, Hamilton, Welch, & Hinds, 2006). Previous models for public health assessment and planning laid expectations for health improvement squarely on the shoulders of the public health system (Derosé, Schuster, Fielding, & Asch, 2002). MAPP requires community engagement, organization, and collaboration. Complex health issues demand solutions crafted by coalitions possessing a broader view of community standards, strengths, and resources (NACCHO, 2004; Salem, Hooberman, & Ramirez, 2005).

A division director from the local health department (LHD) was designated as the MAPP coordinator, an organizational step shown to improve process effectiveness (Pullen, Upshaw, Lesneski, & Terrell 2005). The County Health Commission, a 15-member coalition of leaders from health and human service agencies, were partners in the MAPP process. Constituted in 1991, the Health Commission advises LHD administrators and board members. Agency vision and values were revised to reflect the collaborative nature of MAPP and fulfill the third MAPP step (NACCHO, 2004).

Two team leaders were designated for each of the four MAPP assessments: community themes and strengths, the local public health system, forces of change, and community health status. Leaders, drawn from the ranks of the health board, LHD administrators, and Health Commission members, were selected based on experience, availability, and commitment (NACCHO, 2004).

Over the next nine months, team leaders devised assessment strategies, supervised, and in some cases were directly involved with data collection. Once data were collected, team leaders reviewed, interpreted, and summarized the information for collective consideration and formation of strategic health priorities. Goals, action steps, and evaluation plans were developed for each priority. SCCHD is midway through the action phase of MAPP. The community themes and strengths assessment (CTSA) is described in the following sections.

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## Methods and Instruments for Assessing Community Themes and Strengths

An administrator from a large community health system and a public health nursing faculty member were appointed to lead the CTSA. These leaders decided on a mixed methods strategy, surveys and focus groups, to assess social determinants of health, such as poverty, education, housing, and social cohesion, thus portraying quality of life (QOL) in the county (CDC, 2000; Marmot, & Wilkinson, 2006; NACCHO, 2004).

The Quality of Life survey from the MAPP Handbook (NACCHO, 2004 p.119) was reworded to a 10th grade reading level. Because of its abstract nature, the original item10 was eliminated ("Are community assets broad based and multisectorial"). Elements of items 7, 8, 9, 11, 12 were reconfigured into two different questions: "People in our area are interested informed, concerned, and involved in community life" and "People in my community look out for each other, are tolerant, generous and help each other in times of need." Additional questions were posed on recreation and cultural activities, conveniences like roads, transportation, and shopping, and access to information via mass media and libraries.

The MAPP manual offered no instructions for scoring the Quality of Life Instrument. In order to make judgments about perceived community strengths, concerns, and perceived differences by race, age, gender, residence, and education, participants were asked to respond to a 5-point Likert scale (strongly agree, agree, neutral, disagree, strongly disagree).

All items were phrased positively and scored so that greater agreement represented a higher score. A written statement at the top of the survey explained the purpose, voluntary and anonymous nature of the survey. Surveys were purposively distributed in healthcare facilities, places of employment, a community college, a senior health fair, and several retail settings throughout the county. Surveys listing zip codes outside the county were excluded, leaving 1,696 surveys available for analysis.

### Survey Analysis

Respondents reported zip codes which were recoded into the three county public health service regions. St. Clair County Health Department serves approximately 72% of the county's population and is divided into Region B, the largest metropolitan core, and Region C, smaller remote, rural communities of the county. Region A, served by the other local health department, is predominantly African American. Respondents reported race according to U.S. Census categories. For analysis race was recoded as white, black (together representing 95% of the population), or other races. Four age categories were created; 18-24, 25-44; 45-64; >=65. Education was categorized as less than high school, high school graduate, or any college.

Data were entered into and then analyzed by SPSS. Mean scores for each item (1-5), as well as an overall total mean (11-55) were calculated and analyzed using independent t-tests and analysis of variance. Mean results for each item are displayed in Table 1.

Table 1

*Scores by Item, Race, and Region*

Item	Mean score							Standard deviation						
	Region							Race						
	Overall	A	B	C	White	Black	Other	Overall	A	B	C	White	Black	Other
1. Health Care	3.41	3.22	3.49	3.43	3.44	3.32	3.47	1.12	1.20	1.08	1.07	1.10	1.17	1.23
2. Raise Kids	3.81	3.31	4.00	4.14	3.99	3.44	3.76	1.05	1.05	1.17	.92	.92	.96	1.78
3. Grow Old	3.62	3.31	3.71	3.84	3.69	3.42	3.52	1.05	1.15	.99	.92	.99	1.16	1.16
4. Conveniences	3.71	3.61	3.84	3.43	3.71	3.69	3.47	1.04	1.10	.94	1.13	1.01	1.07	1.29
5. Safe	3.71	3.23	3.84	4.17	3.84	3.44	3.85	1.02	1.09	1.20	.98	.91	1.01	1.23
6. Recreation	3.61	3.28	3.80	3.70	3.76	3.43	3.37	1.11	1.24	1.67	1.00	.99	1.23	1.29
7. Economic	3.22	2.88	3.39	3.27	3.34	2.98	3.15	1.10	1.18	1.03	1.04	1.04	1.19	1.21
8. Information	4.11	3.89	4.22	4.17	4.19	3.99	3.93	.82	.91	.74	.78	.75	.89	1.05
9. Involvement	3.45	3.22	3.54	3.58	3.51	3.28	3.49	1.01	1.06	.97	.95	.96	1.10	1.09
10. Tolerant	3.51	3.31	3.55	3.71	3.60	3.31	3.51	1.07	1.06	1.17	1.00	.96	1.00	1.16
11. Overall	3.69	3.76	3.70	3.57	3.67	3.74	3.62	1.07	1.06	.95	1.00	1.01	.99	.94
12. Total 1-11	39.89	36.94	41.00	41.06	40.71	38.01	39.10	6.91	7.67	6.33	5.83	6.38	8.00	7.24

*Note.* Scale: 5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, 1=Strongly Disagree

## Description of Sample

With the exception of fewer adults age 65 and over in the sample, age demographics were comparable to county age demographics. Education and race closely mirrored county demographics, as did regional residence. Men were dramatically under-represented, women outnumbering men 2½: 1. Table 2 compares sample and county demographics.

## Focus Groups

To compensate for people under-represented in surveys, two older adult (10 and 12 participants) and a men's focus group (15 participants) were conducted. A group for people with chronic health problems (9 participants) and a Spanish-speaking focus group (5 participants) were conducted to capture perspectives of people with special needs. A clergy member focus group (6 participants) was conducted to obtain key-informant perspectives. Semi-structured questions in the same content areas as survey questions were used for focus groups. One individual conducted each focus group, while one or two other team members took field notes. Focus group proceedings were analyzed using constant comparison and were compared to survey results (Lincoln & Guba, 1985).

## Survey Results

Survey results revealed statistically significant differences in overall QOL scores based on age, race, education, and

area of residence. Those residing in Region A, the most economically depressed region, with highest concentration of minority persons, reported significantly lower overall scores and lower scores on most individual items. The exception to this was the item pertaining to transportation, where rural Region C reported the lowest scores. The oldest respondents reported higher total scores. Having any college education was associated with significantly higher scores; while black individuals had lower scores. There were no differences in scores based on gender. Refer to Tables 1-3.

## Focus Group Results

Focus groups themes are displayed in the following text and compared to results from surveys.

### Examples of focus group quotes: Theme personal safety.

"Yeah its safe here, just not as safe as it used to be." (Men's focus group)

"I have a 357, so I feel safe." (Older man, rural focus group)

"Isn't everyone a victim of crime at some time or the other?" (Older woman, rural focus group)

These quotes relate to survey item 5. Lowest scores for this item were observed for urban areas and Black respondents.

Table 2

Sample to County Demographic Comparison and Sample Mean Quality of Life Scores

Characteristic		County (N=258,805)	Sample (n=1696)	Sample mean total QOL
Age	18 - 24	12.3%	25.1%	39.71
	25 - 44	40.4%	36.3%	39.42
	45 - 64	29.1%	25.4%	40.02
	>/=65	18.2%	13.1%	42.03
Gender	Male	47.5%	26.2%	40.03
	Female	52.5%	71.1%	39.84
Race	White	68.2%	61.9%	40.71
	Black	28.9%	22.8%	38.01
	Other	1.6%	6.6%	39.10
Education	< HS	14.8%	19.2%	38.86
	HS Grad	30.2%	29.1%	39.49
	Any College	55.0%	51.7%	40.48
Region	A	28%	29.9%	36.94
	B	51%	53.6%	41.00
	C	21%	16.5%	41.06

Note. Source: United States Department of Commerce Census Bureau. Retrieved 9-29-08, from <http://www.census.gov>

Table 3

*Analysis of Variance Total Quality of Life Scores*

Source	df	F	p	Differences	Tukey's HSD Significance
Race	2	19.99	<.001	*White / Black Black / Other White / Other	<.001 .346 .071
Age	3	6.17	<.001	18-24 / 25-44 18-24 / 45-64 18-24 / >=65* 25-44 / 45-64 25-44 / >=65* 45-64 / >=65*	.926 .924 .002 .569 <.001 .011
Region	2	55.85	<.001	*A / B *A / C B / C	<.001 <.001 .991
Education	2	5.257	.005	< HS / HS < HS / College* HS / College*	.572 .021 .032
Gender	1	.222	.648	Men / Women	Not Done

Note. \* Indicates the pairing with the higher total Quality of Life scores.

### ***Examples of focus group quotes: Sense of belongingness.***

"I wouldn't dare tell my neighbors about my problems, I'd be run out of town." (Man, chronic disease focus group)  
 "We laugh together, cry together, share the good times and the bad." (Older woman, rural focus group)  
 "Christian, Muslim, Buddhist, and Hindu, we can all pull together and work for justice of the people." (Man, clergy focus group)

These quotes relate to survey item 10. Again, lowest scores for this item were observed for urban areas and Black respondents.

### ***Example of focus group quotes: Concern for youth.***

"They don't listen as well as they used to. Kids see how far they can go." (Woman, Spanish speaking focus group)  
 "I'm a Boy Scout leader, and I can tell you kids are different than they used to be!" (Men's focus group)  
 "Kids don't have parents at home any more when they get home from school and they have more chance to get in trouble." (Older woman, rural focus group)

These quotes relate to survey item 2. Again, lowest scores were observed for urban areas and Black respondents.

### ***Example of focus group quotes: Health behaviors.***

"I see people moving toward being more health conscious than ever." (Man, clergy focus group)  
 "There are more drugs being used now, and the drugs are way more dangerous than they used to be." (Men's focus group)

These quotes relate directly to survey item 5 on Safety, and indirectly to survey item 6 on Recreation.

### ***Emerging Strategic Health Issue***

CSTA findings and findings from the three other MAPP assessments were summarized and presented at a day-long, goal-mapping session attended by 65 county health and human service agency providers. By the end of the day, findings were consolidated into six strategic health priorities, operationally defined as critical challenges necessary to achieve the vision of community health. Findings from CTSA and the final six strategic priorities are displayed in Table 4. The remainder of this paper will focus on one of the six strategic issues, community connectedness, including a description of how this county chose to address this issue.

Table 4

*Linking Strategic Issues to Community Themes and Strengths Assessment*

Issues identified by CTSA	Strategic issues identified by overall MAPP process
How can:	How can the county's health care community:
<ul style="list-style-type: none"> <li>• Perceptions of safety risks impact behavior, well-being, and quality of life?</li> <li>• We help young people learn life skills, become appropriately engaged in community life, and adopt healthy behaviors?</li> <li>• We promote and support behaviors that reduce health risks and lead to healthier lives for county citizens?</li> <li>• The county become a place where all citizens feel that they belong, are valued, and enjoy a high quality of life?</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen the public health workforce?</li> <li>• Address needs of those who require behavioral health services? Improve health outcomes for cardiovascular diseases, maternal-child health, and respiratory diseases?</li> <li>• Improve health services to the aging community?</li> <li>• Improve access to care?</li> <li>• Create a broader sense of community connectedness?</li> </ul>

***Community Connectedness as a Public Health Issue***

Creating a broader sense of community connectedness can be traced to CSTA findings including perceived differences in QOL, safety risks, and the need to engage young people in the county. While community connectedness (CC) is strikingly different than traditional public health priorities, it is also a very important socio-environmental health determinant.

Community involvement, social networking, and activities that create social bonds between people bolster the health of individuals and families living in those communities. One of the CDC's objectives for healthy communities is to "support the design and development of built environments that promote physical and mental health by encouraging healthy behaviors, quality of life, and social connectedness," (CDC, n.d.). Community connectedness is also consistent with MAPP principles. One of the stated benefits of MAPP is that community-driven processes lead to innovative solutions, community ownership of initiatives, and sustainable solutions to complex problems (NACCHO, 2004, p. 5).

***A Public Health Issue Yes, but What Next?***

Next steps for team members were to set goals, identify best practices in the region, and engage more people to work on the CC priority. Two goals were established: increase the sense of community connectedness within the county and increase collaboration among existing community agencies. To identify exemplars of connected communities, team members interviewed Health Commission members, seeking recommendations of exemplary communities. A small, rural, racially-integrated community was identified as a community that might exemplify community connectedness. Over the next six months, nursing students assigned to the LHD for public health clinical were asked by team members to map assets of this community (Kretzmann & McKnight,

1993). Students interviewed community leaders, business persons, school officials, and clergy to gain insight about strengths, relationships, and bonds within the community. Themes identified from the asset map were a strong sense of community identity, pride in heritage of racial diversity and the ability of community members to spontaneously mobilize during times of crises.

One year after identifying CC as a strategic priority, more people were now involved in the work group. One of the original CSTA leaders withdrew because of a job change and was replaced by the MAPP coordinator from the LHD. Several teams of public health clinical nursing students had offered contributions, and a municipal planner joined the team. While the team had a better understanding of CC, the next challenge was how to build connected communities.

Community leaders were invited to a brainstorming session facilitated by the Mid-America Regional Public Health Leadership Institute (MARPHLI) in August 2007. The purpose of this session was to generate more ideas and recruit additional collaborators for priority work groups. One of the ideas generated was to use the Internet to connect county citizens around a health and fitness theme. Fitness as a means to connect communities would also address the strategic priority for cardiovascular and respiratory disease (Table 4).

***The Power of an Idea***

The CC team named the fitness challenge Get Up and Go! and designated April 2008, public health month, as campaign month. Organizational efforts were underway. Tips for leading and organizing fitness teams was selected as the theme of the Health Commission's 2007 Fall conference. Nursing students assigned to the LHD for clinical helped by assembling a compendium of community-oriented fitness resources for conference attendees. Local fitness experts and State Department of Public Health personnel were recruited



as speakers. The day before the conference, the largest regional newspaper published a detailed article describing this campaign designed to connect communities and promote fitness. A cartoon character in the article subsequently became the campaign mascot.

At the conclusion of the conference, a dozen additional people signed on to work on Get Up & Go! Co-chairs of the CC team, the MAPP coordinator and nursing instructor, assumed the leadership role for Get Up & Go! Priorities at this point were to provide ongoing support for new volunteers, develop and launch the website, and continue planning for campaign month.

Get Up & Go! was also selected as the theme for the annual Spring public health foundation fund-raising dinner. A local, former Olympic runner accepted the invitation as keynote speaker for the dinner, as well the role of honorary campaign chairperson.

A local web-designer agreed to fast-track website development to meet the mid-February launching deadline. Funding for website development was provided by a grant from the LHD Foundation. Another public health nursing instructor, a member of the LHD Foundation Board, was becoming increasingly involved in the campaign. These four individuals, the campaign co-chairs, the nursing instructor, and the web-designer became the core campaign committee.

The web-site launch deadline was approaching, so it was important to convey to the world the goals and essence of Get Up & Go! The goals listed for the 2008 campaign were to challenge communities, groups, and organizations in the county to participate in health and fitness activities; provide suggested ideas to get started and keep going; and to urge citizens to recruit, encourage, and support each other in health and fitness efforts.

By mid-January, weekly meetings were hosted at the LHD to support efforts of any individual willing to lead fitness initiatives or work on the overall campaign. At times, it appeared nature was conspiring against the campaign, as snow and ice storms resulted in the cancellation of three of these sessions. Despite these setbacks, more volunteers were attending meetings or expressing interest through email contact. Additional grant funds were secured from the Medical Society's Health Alliance making it possible to purchase marketing materials. A local distributor of a sports beverage agreed to print campaign signs and banners.

Public health clinical nursing students continued to assist by contacting and explaining the campaign to local, elected officials. Eventually 13 of 19 mayors and the county executive issued official Get Up & Go! declarations. One mayor was so enthused that he signed his entire small village up as participants.

The cartoon character appearing in the October news article was, at this point, a nameless mascot. A name-the-mascot contest for elementary schools was initiated. Nursing students promoted the campaign and contest to schools through mailings and follow-up phone calls.

The campaign kick-off was held in late March at the local community college. A group walk dedicating a new walking trail officially opened the Get Up & Go! campaign. Blood pressure and weight screenings were offered at this event. Health and fitness representatives attended to describe their organizations and promote upcoming events.

At the time of the kick-off event, the website had been operational for a month, receiving thousands of hits. Features of the website included a calendar promoting local fitness events and resources, accounts of participant activities including photos, endorsements of local officials, links to Internet resources and best practices, inspiration and encouragement, ideas for fitness activities, sponsor and partner acknowledgements, and online registration forms. Highly diverse teams representing units as small as families and as large as entire communities, schools, workplaces, faith-based organizations, and health groups were all represented. The campaign was drawing attention from an ever-widening audience.

Planning began for a wrap-up celebration. As the committee considered the location for the celebration, a principal from one of the largest high schools in the county contacted one of the committee members asking if Get Up & Go! would like to collaborate with their second annual Race for Character. Scheduled for the second Saturday in May, the date was perfect, the central location offered a beautiful setting. Most importantly, this partnership demonstrated precisely the kind of collaboration consistent with the campaign. The celebration was scheduled to occur after the Race for Character and featured food, beverages, demonstrations, displays, health screenings, fitness activities, games, a recognition ceremony, attendance prizes, comments by several local mayors, the newspaper publisher, health officials, and the announcement of the name-the-mascot contest winner. A nationally known musician served as master of ceremonies for the celebration, along with dozens of volunteers who agreed to help with the event.

Attendance at the Race for Character nearly doubled from the previous year, attributed by the principal to the connection with the Get Up & Go! campaign. By the time of the celebration, 110 teams representing 23,000 individuals in the county were associated with the campaign. The website had received over one million hits, with 17,000 unique visitors. Partners and sponsors for the campaign were as diverse as the teams themselves: professional and semi-professional sports teams, physicians, chiropractors, personal trainers, a local winery, local newspapers, three health departments, schools, colleges, the YMCA, and too many more to mention.

### ***Connected to the Community and to the World***

Days before the celebration event an unexpected email message was received by one of the campaign co-chairs from the World Harmony Run, an International Torch Relay. Relay runners, scheduled to be in the region the day of the

celebration, learned of the campaign and asked if they could attend. Their race course was adjusted to time an appearance at the conclusion of the celebration. The appearance of runners from around the world, whose only goal is to promote world harmony, captured the essence of the Get Up & Go! campaign. It was the highlight of the day and a very moving experience (World Harmony, n.d.).

### **Looking Back**

Admittedly, the campaign exceeded everyone's expectations. As a strategy to create a broader sense of community connectedness through an Internet fitness campaign, Get Up & Go! challenged communities to engage in activities to improve health and fitness, provided ideas, support, inspiration, encouragement and recognition to participants. The campaign met both goals of increasing community connectedness and collaboration among community agencies. When measured against the ten essential public health services, the campaign has helped inform, educate, and empower people about health issues; mobilize community partnerships to identify and solve health problems; develop policies and plans that support individual and community health efforts (NACCHO, 2004).

Evidence of the success is apparent in the numbers, the diversity, and the sometimes moving stories of participants. The master of ceremonies for the celebration event started an exercise program, lost 20 pounds, and is now off blood pressure medicine, as is one long-time municipal worker from the celebration host city. While attending the celebration event, one woman using her portable oxygen for her COPD, was surprised to learn she was the top distance walker for her group of people with lung disease.

A first-grade class won the contest naming the mascot "Strong-Go." They chose this name because "he is strong and on the go. He can lift up the whole county and get people to be fit and healthy." The first graders claimed, "It is important to be fit because it helps our body stay healthy and allows us to be active when we need to be active. Also, it helps our body to not become sick." The class chose to walk together 10-15 minutes every day for their activity (<http://www.getupgo.info>).

### **Play It Forward**

A strategic priority to connect communities in the county emerged from MAPP, specifically the CTSA. This LHD chose to connect people and communities through a health and fitness challenge. The goals were broad, challenge people to participate, bring someone along on the journey, and inspire other groups and communities to do the same. The campaign continues, and is now considered by those involved in the organization and implementation as a movement.

Get Up & Go! has brought people and communities throughout St. Clair County together. Organizers are crafting a three year strategic plan, establishing priorities, setting goals and evaluation measures, budgeting, developing marketing

plans, and recruiting more partners. Recently, Get Up & Go! was awarded a planning grant to send ten community leaders to Washington, DC to work with CDC and national YMCA staff on the Pioneering Healthy Communities initiative. The campaign originally designated April 2007 as the month to kick-off a 30-day fitness challenge. April 2007 was the beginning of a continuing, ever growing, effort to improve the health, well-being, and quality of life for citizens in St. Clair County.

### **Conclusion**

Public health leaders come from health education, environmental studies, nursing, nutrition, and social work. Regardless of training, public health leaders are confronted by increasingly complex challenges. Essential public health services include community engagement, involvement, and collaboration. Professional organizations for health education and public health demand competency in these areas (National Commission for Health Education Credentialing, 2002; Public Health Foundation, 2001); yet, public health professionals often find these partnerships, cumbersome, time-consuming, and frustrating. MAPP (Mobilizing for Action through Planning and Partnerships) points out the advantages of partnerships and provides guidance in building relationships and capacity to address complex public health problems.

### **References**

- Centers for Disease Control and Prevention. (n.d.). *Healthy communities objectives*. Atlanta, GA: CDC, Office of Strategy and Innovation. Retrieved September 4, 2009, from <http://www.cdc.gov/osi/goals/places/communities.html>
- Centers for Disease Control and Prevention. (2000). Community indicators of health-related quality of life in the United States 1993-1997. *Mortality and Morbidity Weekly Report*, 49(13), 281-285.
- Deroose, S. F., Schuster, M. A., Fielding, J. E., & Asch, S. M. (2002). Public health quality measurement: Concepts and challenges. *Annual Review of Public Health*, 23, 1-21.
- Erwin, P. C., Hamilton, C. B., Welch, S. B., & Hinds, B. (2006). The local public health system assessment of MAPP/the national public health performance standards local tool: A community-based, public health practice and academic collaborative approach to implementation. *Journal of Public Health Management and Practice*, 12(6), 528-532.
- Institute of Medicine (1988). *The future of public health*. Washington, DC: National Academy Press.
- Kretzmann, J. P., & McKnight, J. L. (1993). *Building communities from the inside out*. Chicago: ACTA Publications.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

- Marmot, M., & Wilkinson, R. G. (Eds.). (2006). *The social determinants of health*. New York: Oxford University Press.
- National Association of County and City Health Officials. (2004). *MAPP handbook: Achieving healthier communities through MAPP: A user's guide*. Washington, DC.
- National Commission for Health Education Credentialing. (2002). *Responsibilities and competencies*. Retrieved July 1, 2008, from <http://www.nchec.org/aboutnchec/rc.htm>
- Public Health Foundation Council on Linkages Between Academia and Public Health Practice. (2001). *Core competencies for public health practice*. Retrieved July 1, 2008, from <http://www.phf.org/competencies.htm>
- Pullen, N. C., Upshaw, V. M., Lesneski, C. D., & Terrell, A. (2005). Lessons from the MAPP demonstration sites. *Journal of Public Health Management Practice* 11(5), 453-459.
- Salem, E. (2005). The promise of MAPP: A transformational tool for public health practice. *Journal of Public Health Management Practice*, 11(5), 379-380.
- Salem, E., Hooberman, J., & Ramirez, D. (2005). MAPP in Chicago: A model for public health systems development and community building. *Journal of Public Health Management Practice*, 11(5), 383-400.
- World Harmony Run. (n.d.). Retrieved May 28, 2008, from <http://www.worldharmonyrun.org/>



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